

WHAT IS CLAIMED IS:

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A device comprising:

an industrial control unit;

an industrial control panel; and

a communication link;

wherein said industrial control panel comprises a plurality of functional units, each of which is furnished with a respective USB controller, and an integrated USB hub operable to connect the USB controllers to the respective functional units, and wherein further, said industrial control panel is connected to said industrial control unit via said communication link.

2. A device according to claim 1, wherein said industrial control unit comprises a USB interface, and said communication link is a USB line that is connected to the USB interface of said industrial control unit.

3. A device according to claim 1, wherein the functional units are input and output components.

4. A device according to claim 3, wherein the functional units are selected from a group comprising an operator keyboard, a touch screen input unit, a status display, a key display, a touch pad, a roller ball, and a piezo pad.

5. A device according to claim 1, wherein the functional units comprise a communication interface operable to connect additional control devices and output devices or for temporary connection of mass storage devices.

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6. A device according to claim 1, wherein a line length of said communication link is greater than 5 meters.

7. A device according to claim 1, wherein the USB hub is connected to said industrial control unit via a two-wire connection.

8. A device according to claim 1, further comprising:
an additional USB hub assigned to said control panel, said additional USB hub being connected to the functional units of said control panel via a first USB line, and connected to the functional units of at least one additional control panel via a second USB line, and connected to said industrial control unit via a third USB line.

9. A device according to claim 8, wherein said additional USB hub is physically integrated into said control panel.

10. An industrial control panel comprising:
a plurality of functional units, each of which is associated with a respective USB controller; and
an integrated USB hub operable to inter-connect the USB controllers of the functional units,
wherein said industrial control panel is connected to a secondary device via a communication link operably connected to said integrated hub.

11. An industrial control panel according to claim 10, wherein said functional units are input and output components.
12. An industrial control panel according to claim 11, wherein said functional units are selected from a group comprising an operator keyboard, a touch screen input unit, a status display, a key display, a touch pad, a roller ball, and a piezo pad.
13. An industrial control panel according to claim 10, wherein said functional units comprise a communication interface operable to connect additional control devices and output devices or for temporary connection of mass storage devices to the industrial control panel.
14. A method for sending control signals within an industrial facility, said method comprising:
 - providing an industrial control unit;
 - providing an industrial control panel having a plurality of functional units, each functional unit having a respective USB controller; and
 - operably connecting said industrial control unit to each of the plurality of functional units via a USB hub having a panel connection with a corresponding connection for each of the functional units and a control unit connection for sending or receiving control signals to or from said industrial control unit.
15. A method for sending control signals as set forth in claim 14, further comprising:

providing a front USB interface device;

providing an external device;

operably connecting the external device to the USB hub through the front USB interface device; and

sending control or data signals to the external device from the industrial control unit via the USB hub and the front USB interface device.